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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/274,015 03/22/99 HEBERT E 174-745

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QM22/0105

EXAMINER

KIM, P

ART UNIT

PAPER NUMBER

3729

DATE MAILED:

01/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/274,015

Applicant(s)
Edmund Herbert And Christopher Cavallaro

Examiner
Kim

Group Art Unit
3729



☐ Responsive to communication(s) filed on _____

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-22 _____ is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-22 _____ is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 84
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin in view of Cavallaro.

Melvin discloses a solid core based on a first rubber material and a core out layer based on a second rubber material different properties from the first rubber based material. An inner cover layer made from ionomer material having a first shore D from about 65 or more and an outer cover layer made from thermoset material having a second shore D from 50 or less which is less than the first shore D. The center core has from 0.787 inches to 1.378 inches thickness. The outer core layer thickness is 1.47 inches to 1.545 inches and the inner cover layer thickness is from 0.01 inches to 0.10 inches. Melvin also teaches a first crosslinking agent of the golf ball is Zinc Oxide which is from about 2 to about 30 parts by weight per 100 parts by weight of the rubber component and a second crosslinking agent is fatty acid component which is about 1 to about 25 parts by weight based on 100 parts rubber. However, Melvin doesn't disclosed a flexural modulus of the inner cover. Cavallaro teaches the flexural modulus of the cover layer is greater than 75,000 psi. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make a multilayer golf ball of Melvin with the flexural modulus of Cavallaro because the golf ball has the distance more like a conventional two piece ball, but has a soft feel, a high spin and durability by using a soft layers. The amount of the corsslinking agent

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is well known of art, generally ranges from 20 to 50 parts by weight of total polymer content and is more preferred about 35 to 45 parts by weight. Therefore, the crosslinking agents are being a designer's choice to use a desirable materials and fillers to make the core to fit a particular type of the golf ball.

2. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin in view of Cavallaro, further in view of Tanaka.

Melvin, as modified by Cavallaro, teaches as set forth above. Paragraph 61-67 on page 10 of Tanaka teaches normal composition for balata cover prepared by mixing with fillers and accelerator. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make a multilayer golf ball with the flexural modulus of Melvin, as modified by Cavallaro, because the golf ball with balata cover produces satisfy excellent shot feel and control properties in comparison with a regular ionomer resin cover.

Claim Objections

3. Claim 1 is objected to because of the following informalities: "a solid outer layer" should be "a core outer layer". Appropriate correction is required.

4. Claim 18 is objected to because of the following informalities: "a solid outer layer" should be "a core outer layer". Appropriate correction is required.

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Additional Remarks

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cavallaro et al. (US PAT. 5,810,678), Sullivan et al. (US PAT. 5,779,561), Kato et al. (US PAT 5,704,852), Cavallaro et al. (US PAT. 5,759,676), Cavallaro et al. (US PAT. 5,688,191), and Yokota et al. (US PAT. 5,776,013) are cited to further show the state of the art with respect to a golf ball with multilayers.

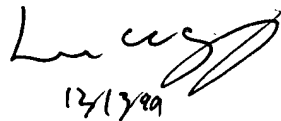
Conclusion

6. Any inquiry concerning this communication should be directed to Paul D. Kim at telephone number (703) 308-8356. The examiner can normally be reached between the hours of 6:30 AM to 4:00 PM Monday thru Thursday and every other Friday (first Friday of the bi-week).

Paul D. Kim

Patent Examiner, Art Unit 3729

December 7, 1999


12/13/99
LEE YOUNG
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